UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,097	01/18/2002	Jong-Han Kim	678-797 (P10029)	9866

28249 7590 12/04/2006

DILWORTH & BARRESE, LLP
333 EARLE OVINGTON BLVD.
UNIONDALE, NY 11553

EXAMINER	
HAN, CLEMENCE S	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/052,097	KIM ET AL.	
	Examiner	Art Unit	
	Clemence Han	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 January 2002* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/27/06, 9/11/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 1, 7 and 18 are objected to because of the following informalities: There are typographical errors in "a data rate request message for requesting transmission of a data rate". They should be changed to "a data rate request message for requesting transmission of a data rate request" (see specification page 14 line 23-24). Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 recites the limitation "the base station" in line 5. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 7 recites the limitation "the control signal" in the last line. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 13 recites the limitation "the packet data" in line 4. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 18 recites the limitation "the reverse transmission" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claim 1-13, 16-20, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Rezaiifar et al. (US Pub. 2003/0002464).

Regarding to claim 1, Rezaiifar teaches a base station apparatus 4 in a mobile communication system supporting packet data transmission, comprising: a controller for generating a data rate request (DRQ) message for requesting transmission of a data rate request, when there is a packet to transmit in a state where there is no data communication between the base station 4 and a mobile station 6 [0119] (see Figure 9B); and a channel transmitter for transmitting the data rate request message generated from the controller to the mobile station [0119] (see Figure 9B).

Regarding to claim 2, Rezaiifar teaches the data rate request message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 3, Rezaiifar teaches the channel transmitter includes a shared power control channel (SPCCH) transmitter for transmitting a power control bit for controlling transmission power of the mobile station [0069].

Regarding to claim 4, Rezaiifar teaches the controller provides the channel transmitter with an ACK (Acknowledgment) message in response to a detection ACK signal of the data rate request message from the mobile station [0119] (see Figure 9B).

Regarding to claim 5, Rezaiifar teaches the ACK message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 6, Rezaiifar teaches the controller provides the channel transmitter with a power control bit for controlling transmission power of the mobile station, after transmitting the ACK message [0069].

Regarding to claim 7, Rezaiifar teaches a mobile station apparatus in a mobile communication system supporting packet data transmission, comprising: a gating signal generator for generating a gating signal for gating on/off a reverse signal transmitted to a base station after completion of packet data communication, and generating a gating signal for immediately resuming transmission of the reverse signal upon receipt of a data rate request message for requesting transmission of a data rate request from the base station when there is no data communication between the base station and the mobile station [0119] (see Figure 8B and 9B); a controller for gating on/off the reverse signal according to the gating signal from the gating signal generator [0119] (see Figure 8B and 9B); and a transmitter for gating transmission of the reverse signal transmitted to the base station according to the control signal from the controller [0119] (see Figure 9B).

Regarding to claim 8, Rezaiifar teaches the controller provides the transmitter with a power control signal for the reverse signal so as to increase

transmission power of the reverse signal little by little from predetermined initial access power, upon resumption of the reverse signal [0069].

Regarding to claim 9, Rezaiifar teaches the controller provides the transmitter with a power control signal for the reverse signal so as to control transmission power of the reverse signal according to a power control bit received from the base station, after receipt of an ACK message responsive to transmission of the reverse signal [0069].

Regarding to claim 10, Rezaiifar teaches the data rate request message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 11, Rezaiifar teaches the ACK message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 12, Rezaiifar teaches the data rate request message and the ACK message are received over a forward shared power control channel (SPCCH) [0069].

Regarding to claim 13, Rezaiifar teaches packet data transmission method of a base station in a state where there is no data communication between the base station and a mobile station, comprising the steps of: transmitting a data rate request message to the mobile station to transmit the packet data [0119] (see Figure 9B); transmitting an ACK message to the mobile station for a prescribed time

period in response to a detection ACK signal of the data rate request message from the mobile station [0119] (see Figure 9B); and transmitting the packet data along with a power control signal after transmitting the ACK message [0119] (see Figure 9B).

Regarding to claim 16, Rezaiifar teaches the data rate request message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 17, Rezaiifar teaches the ACK message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 18, Rezaiifar teaches a packet data transmission method of a mobile station in a mobile communication system supporting packet data transmission, comprising the steps of: gating on/off a reverse signal transmitted to a base station, after completion of packet data communication [0119] (see Figure 8B and 9B); and resuming the reverse transmission, upon receipt of a data rate request message for requesting transmission of a data rate request from the base station when there is no data communication between the base station and the mobile station [0119] (see Figure 8B and 9B).

Regarding to claim 19, Rezaiifar teaches upon resumption of the reverse transmission, transmission power of the reverse signal is increased little by little from predetermined initial access power for a prescribed time [0069].

Regarding to claim 20, Rezaiifar teaches controlling transmission power of the reverse signal according to a power control bit received from the base station, upon receipt of an ACK message responding to the reverse transmission from the base station [0069].

Regarding to claim 23, Rezaiifar teaches the data rate request message is comprised of a prescribed number of identical power control bits [0069].

Regarding to claim 24, Rezaiifar teaches the ACK message is comprised of a prescribed number of identical power control bits [0069].

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claim 14, 15, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rezaiifar et al. in view of Padovani et al. (US Pub. 2003/0142656).

Regarding to claim 14, Rezaiifar teaches packet data transmission method of a base station in a state where there is no data communication between the base station and a mobile station, comprising the steps of: transmitting a data rate request message to the mobile station to transmit the packet data [0119] (see Figure 9B); transmitting an ACK message to the mobile station for a prescribed time

period in response to a detection ACK signal of the data rate request message from the mobile station [0119] (see Figure 9B); and transmitting the packet data along with a power control signal after transmitting the ACK message [0119] (see Figure 9B). Rezaiifar, however, does not teach dropping the packet data to be transmitted, upon failure to receive a detection ACK signal of the data rate request message from the mobile station. Padovani teaches dropping the packet data to be transmitted, upon failure to receive a detection ACK signal of the data rate request message from the mobile station [0073]. It would have been obvious to one skilled in the art to modify Rezaiifar to drop the packet data to be transmitted, upon failure to receive a detection ACK signal of the data rate request message from the mobile station as taught by Padovani in order to save power if the mobile station is occupied and cannot immediately respond.

Regarding to claim 15, Padovani teaches retransmitting the data rate request message after suspending transmission of the data rate request message for a prescribed time, upon failure to receive a detection ACK signal of the data rate request message from the mobile station; and dropping the packet data to be transmitted, in case of failing to receive the detection ACK signal until a number of transmissions of the data rate request message reaches a prescribed number [0073].

Regarding to claim 21 and 22, Rezaiifar in view of Padovani teaches using acknowledgement in dropping and retransmitting packet communication from the base station to the mobile. Rezaiifar in view of Padovani, however, does not teach using acknowledgement in dropping and retransmitting packet communication from the mobile to the base station. It would have been obvious to one skilled in the art to modify Rezaiifar in view of Padovani to use acknowledgement in dropping and retransmitting packet communication from the mobile to the base station in order to save power if the base station is occupied and cannot immediately respond.

Response to Arguments

13. Applicant's arguments with respect to claim 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. H.

Clemence Han
Examiner
Art Unit 2616

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600